



EPA Region 5 Records Ctr.



258550

June 12, 2006

Mr. Nabil S. Fayoumi
U. S. EPA - Region 5
77 West Jackson Boulevard (SR-6J)
Chicago, Illinois 60604-3590

**Re: Sauget Area 2 Site – October 3, 2002 Unilateral Administrative Order
(UAO) Groundwater Operable Unit
Monthly Report; May 1 - May 31, 2006 Reporting Period**

Dear Nabil:

Attached is the Monthly Report for the Sauget Area 2 Site October 3, 2002 Unilateral Administrative Order (UAO) - Groundwater Operable Unit. This submittal is in fulfillment of the monthly reporting requirements of the UAO, Section XII, paragraph 62, Progress Reports. This report is for the period May 1 – May 31, 2006.

Sincerely,

A handwritten signature in black ink, appearing to read "Steven D. Smith". The signature is fluid and stylized, with the first and last names being more prominent.

Steven D. Smith
Project Coordinator

cc: Ken Bardo, - U. S. EPA
Mayor Sauget - Sauget, IL
Sandra Bron – IEPA
Mike Coffey - USFWS
Village of Sauget – c/o P. H. Weis & Associates (Attn: Brian Nelson)
Mayor Frank Bergman – Cahokia
L. Glen Kurowski - Monsanto
Cathleen Bumb – Solutia
Linda Tape - Husch & Eppenberger
Richard Williams – Solutia

Sauget Area 2 Site - Sauget, Illinois

October 3, 2002 UAO – Groundwater Operable Unit

Status Report

Date of Report: June 12, 2006
Period Covered: May 1 - May 31, 2006

Work Performed During the Reporting Period

General Site Work

- During the Pre-Final Inspection conducted on June 28, 2005, the one item identified as requiring completion before the Final Inspection was a pressure test on the discharge pipeline. That test was successfully completed on July 14, 2005 and on July 19, 2005 the Agency was requested by e-mail to complete a Final Inspection and issue a Construction Complete notice. At a meeting held on January 12, 2006, it was agreed that a draft of the Final Completion Report would be submitted to the Agency and that submission was made on February 17, 2006.
- Comments on the Operations and Maintenance Plan, which was submitted to the Agency on June 21, 2005, were received on September 20th. Responses to those comments were submitted on April 10, 2006, together with a revised O&M Plan.

Groundwater Treatment

- Interim Operating Period (IOP) III began on February 1, 2006 and was originally scheduled to end on April 30, 2006. However, the system was shut down for most of the month of April (see below) and since the intention of IOP III is to obtain additional operating data over a wide range of river stages, the Agency was requested to extend IOP III for at least one month, to May 31, 2006. The request was approved on April 27th. A request for a further extension through the end of June was denied and IOP III was concluded at the end of May. A report summarizing the results obtained during this interim period will be prepared and recommendations for the long term operating criteria will be presented to the Agency. Until those criteria are finalized, the system will continue to be operated to maintain the total pumping rate equal to the computed inflow rate, based on the average of the gradients measured in the two existing pairs of piezometers located immediately upgradient of the Site R landfill

- For the entire month of May, the system was operated in this manner. The control system was programmed to operate extraction well EW-2, with wells EW-1 and EW-3 shut down for the majority of the month. Because the river level remained high through most of the month, the pumps remained off until May 23rd. The system began pumping at that time and well EW-2 was operated until May 28th. On that date, the flow was high enough to support the operation of two pumps (in excess of 160 gpm) and EW-1 and EW-3 were turned on, while EW-2 was turned off.
- On May 24th, well EW-2 was shut down for several hours while a new remotely operated actuator was installed on the isolation valve for this well. While this work was being done, well EW-1 was operated to maintain control of the groundwater extraction system. The new actuator was tested and put into service that same day, allowing control of the well flow down to approximately 25 gpm (previous minimum control flow for EW-2 was approximately 80 gpm).
- The results for the third quarter (December 2005) groundwater samples of the performance monitoring wells are being validated and the validated results will be submitted to the Agency in June.
- Analytical results for the first quarter 2006 groundwater samples were received in April, as were the first 2006 semiannual surface water and sediment samples. These data are being validated.
- Water level and pumping data for the month of May are attached.

Schedule

The Agency is currently reviewing various submissions to determine if construction is complete.

Submittals During Reporting Period

There were no submittals during the reporting period.

Work Scheduled for Next Reporting Period

- Continue operating the extraction system to maintain the total pumping rate equal to the computed inflow rate
- Prepare a report summarizing the results obtained during IOP III and provide recommendations for the long term operating criteria for the system.
- Submit validated results from the 2006 first quarter groundwater performance monitoring samples and the first 2006 semiannual surface water and sediment samples.
- Obtain 2006 second quarter samples from the groundwater performance monitoring wells.

PUMPING DATA

		PUMPING RATE					SWL
Date/Time		Computed Q	Total Q	EW-1 Q	EW-2 Q	EW-3 Q	
05/01/2006	Daily Average	0.00	0.00	0.00	0.00	0.00	392.98
05/02/2006	Daily Average	0.00	0.00	0.00	0.00	0.00	393.35
05/03/2006	Daily Average	0.00	2.69	0.93	0.85	0.91	393.40
05/04/2006	Daily Average	0.00	0.00	0.00	0.00	0.00	395.45
05/05/2006	Daily Average	0.00	0.00	0.00	0.00	0.00	398.57
05/06/2006	Daily Average	0.00	0.00	0.00	0.00	0.00	398.69
05/07/2006	Daily Average	0.00	0.00	0.00	0.00	0.00	397.89
05/08/2006	Daily Average	0.00	0.00	0.00	0.00	0.00	396.26
05/09/2006	Daily Average	0.00	0.00	0.00	0.00	0.00	394.75
05/10/2006	Daily Average	0.00	0.00	0.00	0.00	0.00	394.20
05/11/2006	Daily Average	0.00	0.00	0.00	0.00	0.00	395.01
05/12/2006	Daily Average	0.00	0.00	0.00	0.00	0.00	395.01
05/13/2006	Daily Average	0.00	0.00	0.00	0.00	0.00	394.62
05/14/2006	Daily Average	0.00	0.00	0.00	0.00	0.00	395.15
05/15/2006	Daily Average	0.00	0.00	0.00	0.00	0.00	395.24
05/16/2006	Daily Average	0.00	3.84	1.51	1.27	1.22	394.42
05/17/2006	Daily Average	0.30	4.90	0.00	4.90	0.00	393.66
05/18/2006	Daily Average	9.79	56.48	0.00	56.48	0.00	392.84
05/19/2006	Daily Average	14.50	47.78	0.00	47.78	0.00	392.68
05/20/2006	Daily Average	0.00	0.00	0.00	0.00	0.00	392.64
05/21/2006	Daily Average	0.00	0.00	0.00	0.00	0.00	392.61
05/22/2006	Daily Average	34.19	0.00	0.00	0.00	0.00	392.42
05/23/2006	Daily Average	62.00	12.08	0.00	12.08	0.00	392.09
05/24/2006	Daily Average	97.15	86.63	8.40	81.63	0.00	392.01
05/25/2006	Daily Average	70.80	71.46	0.00	71.46	0.00	392.12
05/26/2006	Daily Average	85.71	85.96	0.00	85.96	0.00	391.83
05/27/2006	Daily Average	118.65	117.58	0.00	117.58	0.00	391.29
05/28/2006	Daily Average	163.00	153.32	24.30	104.51	24.51	390.83
05/29/2006	Daily Average	195.83	194.13	97.05	0.00	97.08	390.36
05/30/2006	Daily Average	272.74	269.69	134.84	0.00	134.85	389.70
05/31/2006	Daily Average	322.11	323.39	161.40	0.53	161.46	388.97

		GROUNDWATER LEVELS											
Date/Time		PZ-5U	PZ-5D	Delta	PZ-6U	PZ-6D	Delta	PZ-7U	PZ-7D	Delta	PZ-8U	PZ-8D	Delta
05/01/2006	Daily Average	390.31	390.51	0.20	389.84	390.60	0.76	389.96	389.68	-0.28	390.13	390.73	0.60
05/02/2006	Daily Average	390.40	390.60	0.20	389.88	390.04	0.16	390.03	389.74	-0.29	390.19	390.53	0.34
05/03/2006	Daily Average	390.45	390.69	0.24	389.96	390.07	0.11	390.11	389.81	-0.31	390.23	390.62	0.38
05/04/2006	Daily Average	390.59	390.90	0.32	390.06	390.16	0.10	390.17	389.90	-0.27	390.37	390.96	0.58
05/05/2006	Daily Average	390.92	391.43	0.50	390.28	390.35	0.07	390.39	390.13	-0.26	390.69	391.80	1.12
05/06/2006	Daily Average	391.06	391.70	0.65	390.45	390.55	0.11	390.54	390.31	-0.23	390.92	392.14	1.21
05/07/2006	Daily Average	391.25	391.77	0.52	390.59	390.67	0.07	390.71	390.45	-0.26	391.04	392.16	1.12
05/08/2006	Daily Average	391.28	391.71	0.43	390.67	390.73	0.06	390.78	390.53	-0.26	391.09	391.91	0.82
05/09/2006	Daily Average	391.27	391.56	0.30	390.71	390.79	0.08	390.86	390.58	-0.28	391.08	391.61	0.53
05/10/2006	Daily Average	391.24	391.52	0.28	390.71	390.85	0.13	390.86	390.61	-0.26	391.08	391.53	0.45
05/11/2006	Daily Average	391.34	391.58	0.24	390.85	391.00	0.15	390.98	390.68	-0.30	391.13	391.63	0.51
05/12/2006	Daily Average	391.37	391.62	0.25	390.89	390.96	0.07	391.01	390.72	-0.29	391.18	391.69	0.52
05/13/2006	Daily Average	391.37	391.59	0.22	390.89	390.95	0.07	391.01	390.73	-0.28	391.18	391.57	0.39
05/14/2006	Daily Average	391.46	391.69	0.23	390.95	391.00	0.05	391.08	390.78	-0.29	391.25	391.70	0.45
05/15/2006	Daily Average	391.51	391.74	0.23	391.02	391.10	0.08	391.15	390.87	-0.29	391.30	391.79	0.50
05/16/2006	Daily Average	391.59	391.77	0.18	391.07	391.13	0.06	391.21	390.92	-0.29	391.36	391.70	0.34
05/17/2006	Daily Average	391.57	391.66	0.09	391.09	391.14	0.05	391.23	390.93	-0.30	391.34	391.54	0.20
05/18/2006	Daily Average	391.51	391.50	-0.02	391.07	391.10	0.03	391.23	390.87	-0.36	391.23	391.26	0.03
05/19/2006	Daily Average	391.44	391.46	0.02	391.04	391.06	0.02	391.19	390.85	-0.34	391.21	391.20	0.00
05/20/2006	Daily Average	391.40	391.42	0.02	391.01	391.03	0.02	391.15	390.83	-0.32	391.16	391.13	-0.04
05/21/2006	Daily Average	391.44	391.47	0.03	391.03	391.06	0.02	391.18	390.87	-0.32	391.19	391.14	-0.04
05/22/2006	Daily Average	391.38	391.37	-0.01	390.97	391.01	0.03	391.11	390.83	-0.29	391.12	391.07	-0.05
05/23/2006	Daily Average	391.39	391.35	-0.04	391.00	391.03	0.03	391.13	390.85	-0.28	391.12	391.04	-0.08
05/24/2006	Daily Average	391.46	391.38	-0.08	391.04	391.05	0.01	391.19	390.86	-0.33	391.18	391.06	-0.12
05/25/2006	Daily Average	391.45	391.44	-0.01	391.09	391.09	0.00	391.24	390.92	-0.32	391.23	391.12	-0.10
05/26/2006	Daily Average	391.35	391.31	-0.04	391.00	390.97	-0.03	391.15	390.84	-0.31	391.12	391.01	-0.12
05/27/2006	Daily Average	391.25	391.19	-0.06	390.93	390.87	-0.06	391.09	390.75	-0.35	391.04	390.87	-0.17
05/28/2006	Daily Average	391.12	391.03	-0.10	390.84	390.75	-0.09	390.99	390.62	-0.37	390.91	390.69	-0.22
05/29/2006	Daily Average	391.03	390.91	-0.12	390.74	390.66	-0.07	390.89	390.51	-0.37	390.78	390.51	-0.27
05/30/2006	Daily Average	390.93	390.76	-0.17	390.58	390.56	-0.02	390.73	390.38	-0.35	390.66	390.30	-0.36
05/31/2006	Daily Average	390.76	390.57	-0.19	390.47	390.41	-0.06	390.61	390.22	-0.39	390.48	390.04	-0.44

		GROUNDWATER LEVELS							
		PZ- 1_OUTSI DE	PZ- 1 INSIDE	PZ- 2_OUTSI DE	PZ- 2 INSIDE	PZ- 3_OUTSI DE	PZ- 3 INSIDE	PZ- 4_OUTSI DE	PZ- 4 INSIDE
Date/Time									
05/01/2006	Daily Average	391.03	390.08	391.31	389.92	391.50	389.33	390.65	389.76
05/02/2006	Daily Average	391.22	390.11	391.65	389.95	391.77	389.40	390.83	389.83
05/03/2006	Daily Average	391.29	390.16	391.68	390.03	391.84	389.51	390.90	389.89
05/04/2006	Daily Average	392.30	390.29	393.48	390.14	393.52	389.60	391.86	390.05
05/05/2006	Daily Average	394.10	390.56	396.43	390.40	396.33	389.89	393.62	390.47
05/06/2006	Daily Average	394.36	390.79	396.62	390.60	396.53	390.10	393.93	390.69
05/07/2006	Daily Average	394.06	390.94	395.90	390.75	395.87	390.26	393.66	390.84
05/08/2006	Daily Average	393.24	391.00	394.44	390.80	394.50	390.31	392.90	390.81
05/09/2006	Daily Average	392.43	391.05	393.04	390.84	393.19	390.31	392.12	390.79
05/10/2006	Daily Average	392.11	390.98	392.52	390.84	392.69	390.33	391.78	390.72
05/11/2006	Daily Average	392.54	391.10	393.25	390.91	393.37	390.35	392.16	390.83
05/12/2006	Daily Average	392.55	391.17	393.22	391.00	393.37	390.40	392.20	390.89
05/13/2006	Daily Average	392.29	391.14	392.81	390.98	392.97	390.40	391.96	390.85
05/14/2006	Daily Average	392.59	391.18	393.28	391.02	393.42	390.48	392.23	390.92
05/15/2006	Daily Average	392.70	391.25	393.40	391.08	393.54	390.56	392.37	391.00
05/16/2006	Daily Average	392.32	391.32	392.71	391.15	392.89	390.63	392.00	391.04
05/17/2006	Daily Average	391.89	391.34	391.97	391.20	392.20	390.65	391.58	391.02
05/18/2006	Daily Average	391.36	391.18	391.14	390.99	391.41	390.35	391.07	390.85
05/19/2006	Daily Average	391.26	391.17	390.98	390.97	391.27	390.35	390.94	390.81
05/20/2006	Daily Average	391.15	391.16	390.97	391.03	391.24	390.44	390.87	390.77
05/21/2006	Daily Average	391.13	391.20	390.97	391.05	391.23	390.52	390.87	390.84
05/22/2006	Daily Average	391.06	391.15	390.79	391.03	391.08	390.45	390.75	390.76
05/23/2006	Daily Average	390.88	391.21	390.52	391.04	390.81	390.47	390.61	390.76
05/24/2006	Daily Average	390.86	391.09	390.45	390.89	390.74	390.27	390.60	390.75
05/25/2006	Daily Average	390.96	391.21	390.59	390.97	390.88	390.35	390.69	390.81
05/26/2006	Daily Average	390.76	391.09	390.32	390.82	390.62	390.21	390.50	390.66
05/27/2006	Daily Average	390.44	390.95	389.83	390.68	390.14	389.98	390.21	390.54
05/28/2006	Daily Average	390.14	390.69	389.34	390.51	389.71	389.83	389.88	390.33
05/29/2006	Daily Average	389.84	390.41	388.92	390.40	389.28	389.76	389.60	390.00
05/30/2006	Daily Average	389.44	390.12	388.30	390.13	388.66	389.53	389.20	389.71
05/31/2006	Daily Average	388.99	389.77	387.63	389.90	388.02	389.24	388.75	389.44